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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,892	12/29/2003	Yong Jun Kim	11037-219-999	6930

24341 7590 03/09/2006

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EXAMINER
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BROWN, DREW J

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/747,892	<b>Applicant(s)</b> KIM, YONG JUN
	<b>Examiner</b> Drew J. Brown	<b>Art Unit</b> 3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/29/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/29/03</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley et al. (U.S. Pat. No. 6,378,900 B1) in view of Baloch et al. (U.S. Pat. No. 6,459,974 B1) and Saiguchi (JP 2002-19555).

Stanley et al. discloses a method for determining a number of passengers and whether at least one passenger is resident in the passenger seat (Abstract and Figure 10g), and whether the number of the at least one passenger is not one (column 15, lines 10-12; and column 12, lines 42-59; and Figure 10g). In the case that the number of passengers is not one, Stanley et al. determines whether a collision occurs, detects a frontal impact generated from the vehicle collision, and adjusts the pressure in the airbag on the basis of the frontal impact generated (column 3, lines 16-31).

Stanley et al. does not disclose a method of determining a current passenger type corresponding to the at least one passenger when at least one passenger is resident in the passenger seat, where the current passenger type is selected from a plurality of predetermined passenger types. Stanley et al. also does not disclose a method of adjusting the gas pressure for inflating the passenger-side frontal airbag on the basis of the current passenger type. Finally, Stanley et al. does not disclose, in the case of a vehicle collision, whether the vehicle collision is a frontal collision.

Baloch et al., however does disclose a method of determining a current passenger type corresponding to the at least one passenger when at least one passenger is resident in the passenger seat, where the current passenger type is selected from a plurality of predetermined passenger types (column 3, lines 19-31). Also, Baloch et al. discloses a method of adjusting the gas pressure for inflating the passenger-side frontal airbag on the basis of the current passenger type (column 5, lines 57-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Stanley et al. in view of the teachings of Baloch et al. to have a method of adjusting the gas pressure of the airbag on the basis of the passenger type, which is selected from a plurality of predetermined passenger types, in order to provide the optimal inflation of the airbag according to a specific passenger.

Saiguchi discloses a method of determining whether the vehicle collision is a frontal collision (Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Stanley et al. in view of the teachings of Saiguchi to detect the type of vehicle collision in order to determine which airbags in the vehicle should be inflated and the passengers most at risk of injury.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley et al. in view of Baloch et al. and Saiguchi (JP 2002-19555), and further in view of James (U.S. Pub. No. 2005/0200479 A1).

The combination of Stanley et al., Baloch et al., and Saiguchi discloses the claimed invention as discussed above but does not disclose that an alarm is transmitted with a predetermined means for alarming when the at least one passenger in the seat and the number of the at least one passenger is not one.

James, however, does disclose an alarm that determines the number of passengers present. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Stanley et al. in view of the teachings of James to have an alarm that determines when the number of passengers in the seat is not one to alert the occupants of the danger that could result due to the non-recommended positioning during an accident.

***Allowable Subject Matter***

4. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose a method of determining the number and type of passengers present in a vehicle seat, adjusting the gas pressure of the airbag based on the passenger type and frontal impact generated, and for the child only type, adult only type, or the child-adult mixed type situations, determining the severity of the impact according to two predetermined impacts, and adjusting the pressure to be a certain percentage of the normal pressure.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Granier, Stanley et al., Breed et al., Wanami et al., Rundell et al., Kojima et al., Gioutsos et al., Krumm, Thiele et al., Sinnhuber, Corrado et al., Kwon, Foo et al., and Stopper, Jr. et al. disclose similar airbag systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J. Brown  
Examiner  
Art Unit 3616

DJB  
3/3/06



**DAVID R. DUNN**  
**PRIMARY EXAMINER**

3/3/06